WHAT IS CLAIMED IS:

1. An IC chip configured and arranged to be used with an MI sensor which detects an external magnetic field and outputs a sense signal, the IC chip having a rectangular shape and supplied with the sense signal output from the MI element, said IC chip comprising:

an MI element connection electrode connected to said MI element; and

a switching circuit controlled by a pulse signal so as to supply a pulsed magnetizing current to said MI element through the MI element connection electrode,

wherein said MI element connection electrode is located near a side of said IC chip.

2. The IC chip as claimed in claim 1, wherein said switching circuit is located near the side to which said MI element is located.

3. An IC chip configured and arranged to be used with MI elements including first and second MI elements, the IC chip having a rectangular shape and supplied with a sense signal from each of the first and second MI elements, said IC chip comprising:

a first MI element connection electrode connected to said first MI element;

a second MI element connection electrode connected to said second MI element;

a first switching circuit supplying a magnetizing current to said first MI element through the first MI element connection electrode; and

a second switching circuit supplying a magnetizing current to said second MI element through said second MI element,

wherein said first and second switching circuits are separated from each other and located symmetrically with respect to a first diagonal line of the rectangular IC chip, the first diagonal line extending between said first and second MI elements

4. The IC chip as claimed in claim 3, wherein said first and second switching circuits are located on a second diagonal line different from said first diagonal line.

5. The IC chip as claimed in claim 3, further comprising first and second pulse-signal generation circuits which generate pulse signals for controlling said first and second switching circuits, respectively, wherein said pulse-signal generation circuits are located at equal distances from the respective first and second switching circuits.

6. The IC chip as claimed in claim 5, further comprising a signal processing circuit which generates a detection signal corresponding to a magnitude of the external magnetic field by being supplied with the sense signals from said first and second MI elements, wherein said signal processing circuit includes a sampling

circuit and located at equal distances from said first and second switching circuits.

7. The IC chip as claimed in claim 6, wherein an operational timing of said sampling circuit and an operational timing of said first and second switching circuits are synchronized with each other.

8. The IC chip as claimed in claim 6, further comprising an MI element changeover switch which switches a direction of the magnetizing current between said first and second MI elements based on a switching signal supplied from an external part, wherein said pulse-signal generation circuit are commonly used for said first and second MI elements.

9. The IC chip as claimed in claim 6, further comprising an amplifier circuit amplifying the detection signal output from said signal processing circuit, wherein said amplifier circuit is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

10. The IC chip as claimed in claim 9, further comprising an output circuit which outputs the amplified detection signal supplied from said amplifier circuit, wherein said output circuit is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

11. The IC chip as claimed in claim 10, further comprising an output electrode which outputs the detection signal supplied from said output circuit to an external part, wherein said output electrode is located

at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

12. An MI sensor comprising:

an MI element detecting an external magnetic field and outputting a sense signal; and

an IC chip having a rectangular shape and supplied with the sense signal output from said MI element,

wherein said IC chip comprises:

an MI element connection electrode connected to said MI element; and

a switching circuit controlled by a pulse signal so as to supply a pulsed magnetizing current to said MI element through the MI element connection electrode,

wherein said MI element connection electrode is located near a side of said IC chip.

13. The MI sensor as claimed in claim 12, wherein said switching circuit is located near the side to which said MI element is located.

14. An MI sensor comprising:

a first MI element detecting an external magnetic field and outputting a sense signal;

a second MI element detecting an external magnetic field and outputting a sense signal, the second MI element being positioned at a predetermined angle to said first MI element; and

an IC chip having a rectangular shape and supplied with the sense signals from the first and second MI elements,

wherein said IC chip comprising:

a first MI element connection electrode connected to said first MI element;

a second MI element connection electrode connected to said second MI element;

a first switching circuit supplying a magnetizing current to said first MI element through the first MI element connection electrode; and

a second switching circuit supplying a magnetizing current to said second MI element through said second MI element connection electrode,

wherein said first and second MI elements face adjacent sides of said IC chip, respectively; and

said first and second switching circuits are located at identical positions with respect to the respective first and second MI elements.

15. The MI sensor as claimed in claim 14, wherein said first and second switching circuits are located on a second diagonal line different from a first diagonal extending between the adjacent sides facing the first and second MI elements, respectively.

16. The MI sensor as claimed in claim 14, further comprising first and second pulse-signal generation circuits which generate pulse signals for controlling said first and second switching circuits,

respectively, wherein said pulse-signal generation circuits are located at equal distances from the respective first and second switching circuits.

17. The MI sensor as claimed in claim 14, further comprising a signal processing circuit which generates a detection signal corresponding to a magnitude of the external magnetic field by being supplied with the sense signals from said first and second MI elements, wherein said signal processing circuit includes a sampling circuit and located at equal distances from said first and second switching circuits.

18. The MI sensor as claimed in claim 17, wherein an operational timing of said sampling circuit and an operational timing of said first and second switching circuits are synchronized with each other.

19. The MI sensor as claimed in claim 17, further comprising an MI element changeover switch which switches a direction of the magnetizing current between said first and second MI elements based on a switching signal supplied from an external part, wherein said pulse-signal generation circuit and said signal processing circuit are commonly used for said first and second MI elements.

20. The MI sensor as claimed in claim 17, further comprising an amplifier circuit amplifying the detection signal output from said signal processing circuit, wherein said amplifier circuit is located at a position opposite to said first and second MI element connection electrodes with respect to a second diagonal line different from a first diagonal line extending between the adjacent sides facing the first and second MI elements, respectively.

21. The MI sensor as claimed in claim 20, further comprising an output circuit which outputs the amplified detection signal supplied from said amplifier circuit, wherein said output circuit is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

22. The MI sensor as claimed in claim 21, further comprising an output electrode which outputs the detection signal supplied from said output circuit to an external part, wherein said output electrode is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

23. An electronic equipment comprising:

an MI sensor detecting an external magnetic field and outputting a detection signal; and

a functional part using the detection signal to perform a predetermined function,

wherein said MI sensor comprising:

an MI element detecting the external magnetic field and outputting a sense signal; and

an IC chip having a rectangular shape and supplied with the sense signal output from said MI element so as to output the detection signal,

wherein said IC chip comprises:

an MI element connection electrode connected to said MI element; and

a switching circuit controlled by a pulse signal so as to supply a pulsed magnetizing current to said MI element through the MI element connection electrode,

wherein said MI element connection electrode is located near a side of said IC chip.

24. The electronic equipment as claimed in claim 23, wherein said switching circuit is located near the side to which said MI element is located.

25. An electronic equipment comprising:

an MI sensor detecting an external magnetic field and outputting a detection signal; and

a functional part using the detection signal to perform a predetermined function,

wherein said MI sensor comprising:

a first MI element detecting the external magnetic field and outputting a sense signal;

a second MI element detecting the external magnetic field and outputting a sense signal, the second MI element being positioned at a predetermined angle to said first MI element; and

an IC chip having a rectangular shape and supplied with the sense signals from the first and second MI elements so as to output the detection signal,

wherein said IC chip comprising:

a first MI element connection electrode connected to said first MI element;

a second MI element connection electrode connected to said second MI element;

a first switching circuit supplying a magnetizing current to said first MI element through the first MI element connection electrode; and

a second switching circuit supplying a magnetizing current to said second MI element through

said second MI element connection electrode,

wherein said first and second MI elements face adjacent sides of said IC chip, respectively; and

said first and second switching circuits are located at identical positions with respect to the respective first and second MI elements.

26. The electronic equipment as claimed in claim 25, wherein said first and second switching circuits are located on a second diagonal line different from a first diagonal extending between the adjacent sides facing the first and second MI elements, respectively.

27. The electronic equipment as claimed in claim 25, further comprising first and second pulse-signal generation circuits which generate pulse signals for controlling said first and second switching circuits, respectively, wherein said pulse-signal generation

circuits are located at equal distances from the respective first and second switching circuits.

28. The electronic equipment as claimed in claim 25, further comprising a signal processing circuit which generates a detection signal corresponding to a magnitude of the external magnetic field by being supplied with the sense signals from said first and second MI elements, wherein said signal processing circuit includes a sampling circuit and located at equal distances from said first and second switching circuits.

29. The electronic equipment as claimed in claim 28, wherein an operational timing of said sampling circuit and an operational timing of said first and second switching circuits are synchronized with each other.

30. The electronic equipment as claimed in claim 28, further comprising an MI element changeover switch which switches a direction of the magnetizing current between said first and second MI elements based on a switching signal supplied from an external part, wherein said pulse-signal generation circuit and said signal processing circuit are commonly used for said first and second MI elements.

31. The electronic equipment as claimed in claim 28, further comprising an amplifier circuit amplifying the detection signal output from said signal processing circuit, wherein said amplifier circuit is located at a position opposite to said first and second MI element connection electrodes with respect to a second diagonal line different from a first diagonal line extending between the adjacent sides facing the first and second MI elements, respectively.

32. The electronic equipment as claimed in claim 31, further comprising an output circuit which outputs the amplified detection signal supplied from said amplifier circuit, wherein said output circuit is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.

33. The electronic equipment as claimed in claim 32, further comprising an output electrode which outputs the detection signal supplied from said output circuit to an external part, wherein said output electrode is located at a position opposite to said first and second MI element connection electrodes with respect to said second diagonal line.